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Claims

1. A composition for the treatment of an animal afflicted with onycomychosis, the composition comprising:

$$(R^7)_{1-4}$$
 R^2
 R^3

(I)

Where R¹ is hydrogen, alkyl, hetero, heteroalkyl, aryl or heteroaryl;

R³ is hydroxy, alkyl, hetero, heteroalkyl, aryl or heteroaryl;

R² is hetero;

each R⁷ is independently hydrogen, alkyl, hetero, heteroalkyl, aryl or heteroaryl and;

a copper composition;

a peroxide;

a polyhydroxy aromatic compound;

a transition metal coordination composition;

all admixed in a hydrophyllic carrier composition.

- 2. The composition according to claim 1 wherein R² is oxygen.
- 3. The composition according to claim 2 wherein the copper composition is a copper complex.
- 4. The composition according to claim 3 wherein the copper complex is a diamine polymer-copper complex.

- 5. The composition according to claim 1 wherein the coordination composition is a Co chelate or complex.
- 6. The composition according to claim 1 wherein the coordination composition is a Zn chelate or complex.
- 7. The composition according to claim 1 wherein the coordination composition is a Fe chelate or complex.
- 8. The composition according to claim 1 wherein the polyhydoxy aromatic compound is a 1,2,4,5-tetra hydroxy benzene.
- 9. The composition according to claim 1 wherein the peroxide is an organic peroxide.
- 10. The composition according to claim 1 wherein the peroxide is an inorganic peroxide.
- 11. The composition according to claim 1 wherein the peroxide is hydrogen peroxide.
- 12. The composition according to claim 1 wherein the hydrophyllic carrier is between about 50% to about 99% by weight water.
- 13. The composition according to claim 1 wherein the hydrophyllic carrier is between about 1% to about 50% a compound according to formula II

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wherein R⁴ is a heteroatom, R⁵ is a heteroalkyl or heteroatom-H and R⁶ is - CH₃, alkylaryl, aryl or heteroaryl and n and x are independently between 1 and 20.

- 14. The composition according to claim 1 wherein the hydrophyllic carrier is between about 0.1% to about 30% by weight alcohol.
- 15. A pharmaceutical composition for the topical treatment of onychomychosis comprising a composition according to claim 1 and a pharmaceutically acceptable carrier.
- 16. A method for the treatment of white line disease comprising: applying to an afflicted area the whiteline treating composition according to claim 1.
- 17. the method according to claim 16 further comprising cleaning of the afflicted area
- 18. The method according to claim 17 wherein cleaning of the afflicted area consists essentially of debrideing.
- 19. A method of preventing whiteline disease comprising the steps of:

prior to application of the whiteline treating composition.

a) applying to a site in need of treatment a suitable amount of a whiteline treating composition according to claim 1;

- b) applying to the site a barrier composition.
- 20. The method according to claim 19 wherein the barrier composition is a barrier to water.
- 21. The method according to claim 19 wherein the barrier composition is a barrier to oxygen.
- 22. The method according to claim 19 further comprising cleaning the site prior to application of the whiteline treating composition.
- 23. The method according to claim 22 wherein the cleaning of the site comprises the steps of:
 - i) applying a cleaning composition to the afflicted area;
 - ii) causing at least a partial removal of the afflicted tissue.
- 24. The method according to claim 23 wherein steps I and ii are repeated.
- 25. The method according to claim 23 wherein the cleaning composition is a surfactant.
- 26. The method according to claim 23 wherein the cleaning composition contains an enzymatic composition.